EARTH SATELLITE CORPORATION

(EarthSat)

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July 7, 1972

National Aeronautics and
Space Administration
Goddard Space Flight Center
Greenbelt, Maryland 20771

Gentlemen:

RE: MONTHLY PROGRESS REPORT - SR #141: ERTS-A, Snow Enhancement

Earth Satellite Corporation (EarthSat) is pleased to submit a progress report for the period of May 26, 1972 to June 30, 1972. To facilitate NASA review, a consistent format has been adopted for this and all future monthly reports prepared by Geosciences and Environmental Applications Division. Suggestions to improve the format or scope of this report will be welcomed. Your attention is directed to Section H as an ACTION ITEM.

A. TITLE: Facilitating the Exploitation of ERTS-Imagery Using Snow Enhancement Techniques (SR#141)

B. PRINCIPAL INVESTIGATOR: Dr. Frank J. Wobber

C. CONTRIBUTORS: Dr. Frank J. Wobber
Mr. Kenneth Martin
Mr. Orville Russell

D. SUMMARY OF ACCOMPLISHMENTS:
Preliminary projects have been targeted towards completing those tasks listed in Phase I (Pre-Launch Preparations). A brief statement of accomplishments to date is below:

- ERTS simulation imagery of ERAP Area No. 1 (Feather River-Lake Tahoe Basins) has been analyzed to evaluate snow enhancement capabilities (Task 1.0).

- Snow-on-ground report capabilities have been assessed and subscriptions (e.g. New England Climatological Data) taken out to establish a regular snow-on-ground report capability (Task 3.0).

- Weather station locations within the test area have been plotted (on a base map) and their capabilities (i.e.

whether or not they supply snow-on-ground data) recorded (Task 3.0).

•Forms have been prepared to contact those weather station personnel who normally don't report snow-on-ground data to intensify snow report networks (Task 3.0).

•Information of the geology of the test site has been collected (e.g. radar mosaics, 7 1/2 minute topographic sheets) (Task 2.0).

E. SIGNIFICANT RESULTS: None.

F. PROBLEMS:

•Basic data (maps etc.) collection in the Feather River area will not benefit work to be conducted in the Massachusets test area; a firm NASA commitment to overfly the Massachusets test area is essential.

•To initiate Task 4.0 of the pre-launch preparations, a list which details the current boundaries of test sites in the New England area is required. The technical monitor has been advised this data is needed.

G. RECOMMENDATIONS FOR TECHNICAL CHANGES: None

•A request for additional funds to greatly improve the snow depth data acquisition net at relatively low cost has been submitted and is attached.

H. CHANGES TO STANDING ORDER FORMS:

•Changes were necessary within the standing order forms. A revised form with all the necessary corrections incorporated is attached.

I. OVERVIEW OF INVESTIGATION:

•The experiment is progressing on schedule and with a minimum of unanticipated difficulties. Preliminary analysis of Feather River imagery indicates constructive results can be obtained.

Questions concerning this report should be directed to the undersigned at (202) 785-1123.

Sincerely yours,

Frank J. Wobber
Director
Geosciences and Environmental
Applications

FW/vs
Enclosures(2)

EXHIBIT B

EARTH SATELLITE ORDER FORM

NDPF USE
D
N
ID
AA
REP

DATE 1-20-72

PRINCIPAL INVESTIGATOR DR. FRANK WOBBER

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CATALOGS DESIRED

Standard [X] U.S. [ ] Non-U.S.

DCS [ ]

Microfilm [ ] U.S. [ ] Non-U.S.

CHECK IF ADDRESS IS NEW [ ]

GEOGRAPHIC POINTS		CC LOUD COVER	QUALITY	COVERAGE PERIOD		PROD		TAPE MARK	QUALITY	RBV BANDS			MSS BANDS				DELETE
LATITUDE	LONGITUDE			START MMDDYY	STOP MMDDYY	TYPE	FORMAT			1	2	3	1	2	3	4	
43° 15' N	73° 15' W	6	-	110172	040173	-	MSP	-	2	X	X	X	X	X	X	X	
43° 15'	71° 00'	6	-	AND		-	MSP	-	2	X	X	X	X	X	X	X	
40° 15'	71° 45'	6	-	110173	120173	-	MSP	-	2	X	X	X	X	X	X	X	
40° 15'	73° 00'	6	-			-	MSP	-	2	X	X	X	X	X	X	X	
42° 00'	73° 40'	6	-			-	MSP	-	2	X	X	X	X	X	X	X	
39° 40' N	77° 56' W	6	-	110172	040173	-	MSP	-	2	X	X	X	X	X	X	X	
39° 24'	76° 33'	6	-	AND		-	MSP	-	2	X	X	X	X	X	X	X	
38° 51'	76° 47'	6	-	110173	120173	-	MSP	-	2	X	X	X	X	X	X	X	
39° 07'	78° 07'	6	-			-	MSP	-	2	X	X	X	X	X	X	X	

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